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### IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:

Anthony Stratz

Appl. No.

10/613,466

Filed

July 3, 2003

Title

**Snow Removal Device** 

Grp/A.U.

3671

Examiner

Docket No.

319

Mail Stop DD Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## **DISCLOSURE STATEMENT**

Sir:

In order to comply with Discretionary Regulations 37 C.F.R. 1.97 and 1.98, attached hereto is a copy of Form PTO/SB/08A. This Disclosure Statement contains information which the Examiner may consider to be important in considering whether to allow the above application to issue as a patent. None of the prior art discloses Applicant's invention.

U.S. Patent 584,827 issued to B.F. McIndoo on June 22, 1897, entitled "Shovel," discloses a shovel having an auxiliary handle which pivots as shown in FIG. 1 and which is used to make lifting a load carried by the shovel easier. A large number of generally similar auxiliary handles are found in the prior art.

- U.S. Patent 738,057 issued to E.B. O'Connor on September 1, 1903, entitled "Shovel Attachment," discloses a fulcrum type attachment for a shovel to provide additional leverage during a scooping and lifting action. Essentially, the shovel rocks on the fulcrum and eliminates the need to stoop to fill the shovel. O'Connor is an example of the large number of fulcrum-type shovel attachments found in the prior art.
- U.S. Patent U.S. Patent 2,239,297 issued to S.E. Allen et al. on April 22, 1941, entitled "Snow Shovel," discloses a snow shovel that is convertible for use as a plow-type device by adjusting the angle of the shovel blade (see FIG. 3). A frame piece (13) is provided near the upper end of the blade to which pivots (14 and 15) are connected, with handle (11) connected to pivot (14) and brace (16) connected to pivot (15) on one end and to handle (11) on its other end. Bolt (18) on handle (11) slides in longitudinal slot (17) so that shovel blade (10) is pivotable with respect to handle (11) a distance equal to the length of slot (17). Once the desired position is reached, wing-nut (19) is tightened to secure the blade and handle at the desired angle.
- U.S. Patent 2,734,291 issued to C.C. Lasker on February 14, 1956, entitled "Manually Operated Snow Removal Tool," discloses a scoop or shovel having curved slide type legs (11 and 12) with an arcuate pivot type support portion (13) attached to the back of the shovel blade. In use the Lasker tool is pushed over a surface by handle (10) with the shovel blade picking up snow or the like. The tool is then tilted upwardly by pushing down on the handle so that the shovel blade pivoted is off the ground on support portion 13, wherein the tool is pushed to a dumping area on the legs and then pivoted back to its original position so that the snow will slide off the blade. Lasker illustrates an alternative means for lifting and carrying snow to a dumping area, which is the basic purpose of Applicant's invention.
- U.S. Patent 2,769,612 issued to C. Weisheit on November 6, 1956, entitled "Shovel With Lifting Means," discloses another shovel having a fulcrum or lever device attached thereto. Such device is connected to the shovel via plate member (11) on the bottom side of the shovel handle, with rod (15) secured to lug (13) by pivot (a rivet) (14), and with base member (16) connected to the other end of rod (15). A spring (20) connects rod (15) and plate member (11) at another point, while pivotable auxiliary handle (23) is connected to the upper side of the shovel handle. Pulling upwardly on

auxiliary handle (20) and downwardly on the regular handle causes the shovel blade to pivot upwardly so that it is balanced on the fulcrum or lever. Such fulcrums generally aid in the initial lifting process similar to Applicant's invention but still require the user to support the entire weight of the shovel at some point prior to dumping.

- U.S. Patent 3,035,816 issued to M.A. Conant on May 22, 1962, entitled "Foot Lever for a Hand Shovel," discloses another lever device connected to a shovel. As shown in the drawings, pressing downwardly on foot pedal (5) causes the lever to rock so that the shovel blade containing a load is forced upwardly so that the user does not have to bend or strain to lift such load. FIG 4. illustrates that if enough force is placed on the foot lever, the snow or load will continue moving in an upward direction and may then be easily deflected to the side by turning of the shovel handle or blade.
- U.S. Patent 3,043,033 issued to H.O. Ingram et al. on July 10, 1962, entitled "Utility Scoop," discloses an adjustable wheeled manual scoop device (10) which is pivotably secured to an upwardly extending handle arrangement. A "releasable scoop adjusting assembly" (28) is also provided which is pivotable on wheel axle (24) connected to the rear of scoop (10) by arms (22) on one end and having a toothed rack portion (34) on its upper end. A releasable spring locking arrangement is provided, with lever (76) arranged so that when pulled detent (70) is released from toothed end (34) of the assembly (28) so that the angle of the scoop can be adjusted. Ingram et al. discloses a scoop wherein the scoop portion is pivotable in a clockwise or counterclockwise direction with respect to axle (24) to facilitate scooping, carrying and dumping of debris. This arrangement is fairly similar to Applicant's "wheeled" snow shovel/plow embodiment wherein the blade portion is pivotable in a generally similar manner.
- U.S. Patent 3,121,963 issued to C.W. Nolan on February 25, 1964, entitled "Shoveling Device," discloses a wheeled cart-like shoveling aid or scoop having a frame structure (11) including a pair of wheels and an independently pivotable subframe (12) to which scoop (28) is connected (see FIG. 4). The bottom of the scoop, which is actually the rear portion during scooping, is provided in two wall sections (33 and 34), with wall section (34) being retractable. Once the scoop is loaded with snow, the scoop is pivoted upwardly by pulling rearwardly and then downwardly on handle (12a) until a latch member engages a cross rod which holds the scoop in such position. Then, as illustrated in FIG. 4, chain (36) connected to wall section (34) is pulled, causing wall section (34) to retract so the load then essentially drops out of the bottom of the scoop. Nolan illustrates both a means for lifting a load to waist level as well as for then dumping the load. A counterweight is also used to aid in the pivoting motion. However,

the actual mechanical arrangement for accomplishing such lifting and dumping appears to be different from Applicant's invention.

- U.S. Patent 3,343,807 issued to A.L. Moraski on September 26, 1967, entitled "Shovel," discloses a shovel having a pivoting arrangement that is somewhat similar to the Lasker '291 patent discussed above but wherein the arcuate legs on the rear of the shovel are situated on the handle portion of the shovel rather than on the rear of the blade portion. In addition, a pair of roller wheels are provided to facilitate forward or rearward movement of the shovel.
- U.S. Patent 3,748,761 issued to C.H. Chetwynde on July 31, 1973, entitled "Snow Handling Device," discloses a device comprised generally of a carriage (10) supported on wheels (11) and having a forward extension (12) and an upwardly extending jack (13), best shown in FIG. 2. A coupling (21) for holding shovel handle (29) is connected to jack (13), while link (24) on the forward extension (12) also is connected to handle (29) by link (26) in a similar manner. Shovel blade or scoop (30) is situated on the forward end of handle (29), and the jack (13) acts as a fulcrum to aid in lifting snow piled into the scoop. No means for aiding in dumping the snow similar to Applicant's invention appears to be shown, however.
- U.S. Patent 3,923,331 issued to A.A. Hollnagel on December 2, 1975, entitled "Snow Scoop," discloses a bucket-type snow scoop designed to be pushed across the ground such via handle grips (42) on a metal convex dish (30) and runners (32) on the bottom side of the bucket. The scoop (20) is pivotally connected to tubular side members (10) which are connected by metal cross brace (18) by pivot pins (26). Latch arms (48) extend upwardly from bucket (20) and connect with latch pins (44) on side members (10) to prevent the bucket from pivoting to its dumping position. As shown in FIG. 5, the bucket is pivoted forwardly when dumping a load. However, the load is not first lifted as in Applicant's shovel/plow arrangement.
- U.S. Patent 4,125,951 issued to A.W. Huerth on November 21, 1978, entitled "Snow Removal Device," discloses a shovel or plow-like device comprised of a main body member (11) connected to a shovel blade portion having raised side walls, and a handle means. Apparently snow is piled up in the device by pushing it forwardly with the handle, while the snow is released by rapidly decelerating the blade so that the snow is thrown forward.

- U.S. Patent 4,130,953 issued to A.T. Bruno on December 26, 1978, entitled "Snow Jack," discloses a shoveling aid mounted on a platform (10) containing runners and wheels pedestal (14) supported by braces (13). Lever arm (20) having handle (21) on one end and scoop (22) on its other end is supported on pedestal (14) at fulcrum (15). Scoop (22) is attached to lever arm (20) by a horizontal hinge (23) and releasable catch (25), which is connected to release mechanism (27) by rod (26) extending along the length of lever arm (20) to handle area (21). In use, the scoop is positioned on the ground as shown in FIG. 1 and is pushed forward on platform (10) so that snow accumulates in scoop (22). Handle (21) is then pushed downwardly so that the lever action causes the scoop to be lifted to the position shown in FIG. 3. Then the device is moved on platform (10) to a dumping area, where release (27) is actuated, which causes catch (25) to release scoop (22) so that it pivots downwardly on hinge (26) so that the snow in the scoop is emptied. Although the Bruno device does not employ a foot engaging fulcrum to lift the scoop when filled, the dumping mechanism employed in Bruno is generally similar to that of Applicant's invention.
- U.S Patent 4,198,090 issued to D. Gutman on April 15, 1980, entitled "Shovel," discloses a shovel having an adjustable lever mechanism situated on the lower handle portion of the shovel, and an adjustable auxiliary handle mechanism connected to the upper handle portion of the shovel. Gutman also utilizes the fulcrum or lever mechanism to facilitate initial lifting of a load, although the unobvious feature of such patent appears to be the provision of the separate adjustable handle.
- U.S. Patent 4,531,713 issued to F.H. Balboni on July 30, 1985, entitled "Snow Removal Implement," discloses, as best shown in FIGS. 2-4, a plow, a U-shaped handle, and a pivotable fulcrum member (14). When the plow is filled with snow and positioned near a drop area, the fulcrum member is pivoted downwardly, and downward force is applied on the handle so that the plow is lifted upwardly by lever action, and the snow is tossed or flipped off the plow. No means for pivoting or releasing the plow when in a raised position appears to be shown, however, which is a key feature of Applicant's invention.
- U.S. Patent 4,559,726 issued to M. Moisan on December 24, 1985, entitled "Snow Mover," discloses a plow-type snow pusher wherein the angle of the blade with respect to the pusher handle is pivotable. A lifting or lever structure is not provided, however.
- U.S. Patent 4,881,332 issued to G.L. Evertsen on November 21, 1989, entitled "Shovel Lifting Aid," discloses a lifting aid for a shovel comprised of pivotable bar attached to the shovel on which the user's foot is placed. As shown in FIGS. 10-15, the

lever is then pulled rearwardly and the shovel with the load is then essentially balanced on the lifting aid. A wheel may also be provided as part of the lifting aid as shown in FIG. 19. FIG. 4 illustrates the tool handle connection means, which is comprised of sleeve 26 pivotally secured between arms 27 of clevis 18. This arrangement allows the shovel to be pivoted in part 34 of sleeve 26 as in FIG. 14 to dump a load. Evertsen therefore provides both a lifting and dumping aid, although clearly it is different from Applicant's invention.

- U.S. Patent 5,018,282 issued to K.Y. Hong on May 28, 1991, entitled "Mechanical Shovel," discloses a wheeled shovel having a lever mechanism for dumping snow from the scoop. Scoop (30) is nested between cheeks (18) which are part of chassis (14), with blade (26) pivotally connected to the front of scoop (30). Scoop (30) is supported on cheeks (18) by pins (42) slidingly received in longitudinal slots (44). As shown in FIG. 4, when foot pressure is applied to bight (66) on lever arm (58), scoop (30) is slanted rearwardly due to movement of pins (42) upwardly in slots (44). Snow is dumped from the scoop with further pressure applied to the lever, wherein as shown in FIG. 5 the scoop is angled upwardly and forwardly. Hong generally teaches another scoop having a dumping means, although not a lifting means.
- U.S. Patent 5,074,064 issued to J.G. Nickels on December 24, 1991, entitled "Snow Shovel," discloses a shovel supported on front and rear wheels and also having snow ejection plate which when swung from a prone to an upright position by pulling upwardly on hand grips (56) forces snow out of or off of the shovel
- U.S. Patent 5,271,169 issued to K.J. Konsztowicz on December 21, 1993, entitled "Snow Shovel/Pusher," discloses a combination/convertible snow shovel and plow. FIGS. 7-9 illustrate the device being used to push or plow snow, with the device sliding on a pair of collapsible skids or skis. Such invention is directed mainly to an improved means for pushing or plowing snow, rather than also lifting and then dumping the snow as in Applicant's invention.
- U.S. Patent 5,440,828 issued to R.C. Simpson on August 15, 1995, entitled "Manual Snow Removal Tool," discloses a shovel having a handle that is pivotable within a range of angular positions with respect to the blade. A handle angle adjustment mechanism is provided with rod (88) extending upwardly along the rear side of the blade to trigger or release (102) which is used to unlock and adjust the position of the blade.

- U.S. Patent 5,511,327 issued to M.G. Jurkowski et al. on April 30, 1996, entitled "Wheeled Snow Shovelling Device," discloses a cart-like snow shovel or plow having an A-shaped frame, a large centrally located wheel. While snow can be lifted and dropped by pivoting the cart on the wheel, the shovel blade does not pivot as in Applicant's invention.
- U.S. Patent 5,569,651 issued to A. Vroegindewey on September 23, 1997, entitled "Shovel With Lift Aid Attachment," discloses a shovel having a lever type foot pedal which when pressed downwardly causes the shovel to lift upwardly by lever action. An auxiliary handle is provided on the forward end of the lever which is gripped with one hand and used to throw snow off of the shovel blade after it has been lifted upwardly by the lever. Such patent illustrates another lifting aid for a snow shovel which utilizes lever action via a foot pedal to raise the shovel load to around waist height, thereby eliminating the need to bend to pick up the load. However, there is no discussion of a further dumping means for the load other than by use of the auxiliary handle.
- U.S. Patent 5,732,933 issued to F.K. Champi on March 31, 1998, entitled "Lifting Implement," discloses a lifting aid attachment for a conventional snow shovel comprised of a lever arm having an upturned fulcrum with a foot-engaging portion on its end. When the user presses downwardly on the foot-engaging portion and pulls rearwardly on the shovel handle, the shovel is raised to hip level. The lever arm is pivotably connected to a shovel by a hinge clamp (30) having a spring therein, and preferably is adjustable in length. Several alternative embodiments of the invention are shown, such as having a retractor arm on the handle of the shovel (FIGS. 6 and 7), a trapezoidal configuration (FIG. 8), a piston having a gas or air cylinder or spring mechanism to aid in holding the load of the shovel (FIG. 11), and a separate detachable leg which acts as a second base from holding the load (FIG. 12). However, there does not appear to be any means for dumping or releasing the shovel load as in Applicant's invention.
- U.S. Patent 5,918,921 issued to V. Samuelson on July 6, 1999, entitled "Levered Shovel for Moving Snow," discloses a shovel having a wheel assembly connected to the handle of the shovel by post (44), which post and wheel assembly acts as a fulcrum for the shovel. No means for dumping the load on the shovel blade is provided, however.
- U.S. Patent 5,984,393 issued to R.H. Washington on November 16, 1999, entitled "Shovel With Pivoting Head," discloses a shovel and handle assembly wherein the shovel and handle shaft are joined together by a pivot joint which allows the shovel head to rotate around a longitudinal axis with respect to the handle shaft in either a clockwise or counterclockwise direction. The Washington shovel is designed to reduce

the stress caused by the act of turning or twisting and dumping the contents of the shovel, rather than bending and lifting the load. However, the shovel blade pivots to the side rather than forwardly as in Applicant's invention.

- U.S. Patent 6,053,548 issued to L.G. Bowles, Jr. on April 25, 2000, entitled "Manually-Operable Combination Shovel and Plow for Snow and Other Material," discloses a shovel wherein the shovel blade may be positioned at various fixed angles. A joint (13) is provided to connect the shovel blade and handle so that the blade is generally placed at an angle which is convenient for plowing, rather than just shoveling. The joint (13) is comprised of a male joint member (16) and a female joint member (17) which are secured together by pins (18 and 19). A toothed opening (24) having notches (25-27) is provided in male joint member (16) so that the blade can be secured at one of three angles or positions with respect to the handle. In addition, when the user pulls back on the handle, the pins disengage so that the angle of the shovel blade can be easily adjusted. The handle is also adapted with a further handle bar to facilitate plowing, and in addition a wheel assembly (40) may be added to the shovel to make plowing even easier. In addition, a spring may be used to hold the handle in a locked position. Bowles illustrates a shovel wherein the shovel blade pivots to the side rather than downwardly to dump a load of snow as in Applicant's invention.
- U.S. Patent 6,086,049 issued to D.A. Sheils on July 11, 2000, entitled "Mechanical Assistance Mechanism for Shovels," discloses another lever-type ground engaging rod connected near the top of the shovel blade to the shaft of the shovel wherein the shovel is pivotable to the side to facilitate dumping of a load.
- U.S. Patent 6,203,081 issued to E.B. Kegan, Sr. on March 20, 2001, entitled "Easy Lift Levered Shovel," discloses another shovel fulcrum attachment designed to relieve the stress caused by bending and lifting a loaded shovel to around waist level. Levered fulcrum (30) includes a pair of adjustable and pivotable legs (30) having a cross support (33) and a non-slip tip (31). The legs may be easily pivoted and clamped to the shovel handle. A spring arrangement used in pivoting the legs is also provided. FIGS. 8-12 illustrate the operation of the fulcrum to aid in lifting and supporting a load. In FIG. 12, dumping of the snow or load is illustrated wherein the operator grasps the auxiliary handle with one hand and dumps the load to the side. While Kegan, Sr. teaches a new shovel lifting aid, the invention does not address the further stress involved in twisting the shovel to dump a load.
- U.S. Patent 6,457,757 issued to J.D. Hendrick on October 1, 2002, entitled "Snow Shoveling Apparatus With Handle and Blade Adjustable During Movement of Apparatus," discloses an wheeled shovel wherein the angle of the handle and the blade

are adjustable on notched mounting plates. Handle angle and blade angle adjustment levers are also provided so that the settings can be changed during use of the shovel. However, the Hendrick shovel does not appear to be capable of lifting or dumping the snow as in Applicant's invention.

- U.S. Patent 6,485,076 issued to W. N. Chang on November 26, 2002, entitled "Versatile Attachment for Shovel," discloses an attachment for a shovel comprised primarily of a pivotable angled elongated rod having a hand or foot engaging handle on its end. As shown in the drawings, such attachment can be used in several different ways to either lift the shovel with two hands as shown in FIGS. 10, 11, and 12, or to lift the shovel blade upwardly using the attachment as a pivot device as shown in FIGS. 13, 14, and 16. Note in FIG. 14 that the end of the attachment is slidable along the ground so that snow can be transported to a suitable dumping area. There does not appear to be any further means available for dumping the snow such as in Applicant's invention, however.
- U.S. Patent No. 258,260 issued to H.W. Staples discloses a very early snow shovel having a pair of runners on the lower side of the blade (which is three feet square), and a double pusher type handle.
- U.S. Patent No. 2,896,993 issued to J.A. Pollock discloses a pusher type shovel wherein the lateral position of the blade with respect to the shovel is adjustable by rotating the handle slightly so that snow slides off the blade either to the left or right of center.
- U.S. Patent No. 3,583,746 issued to A. Lissakers discloses a scoop shovel comprised of a fabric material supported by a frame which essentially is designed to slide or be pushed along the ground in various directions.
- U.S. Patent No. 3,964,182 issued to J. Pomeret et al. discloses a shovel having a user supported crane-like lifting device attached thereto.
- U.S. Patent No. 4,231,604 issued to J.J. Obergfell discloses a shovel having handle with an enlarged, padded area near the midpoint of the handle. Such pad is intended to act as a fulcrum for the shovel when placed against the thigh just above the knee of the user so that the user's leg may be used as a pivot or lever.
- U.S. Patent No. 4,253,257 issued to D.F. Albert discloses another snow removal device comprised of a sheet of fabric material connected to a frame structure which is pushed across the ground.

- U.S. Patent No. 4,537,433 issued to S.H. Yang discloses another auxiliary handle for a shovel having a fulcrum or lever member to assist in lifting a load.
- U.S. Patent No. 4,772,057 issued to H.R. Harvey discloses an interesting shovel lifting arrangement wherein the shovel is provided with a shoulder strap and in addition the top of the handle is provided with a counterweight which supposedly cancels out the weight of the load on the shovel blade.
- U.S. Patent No. 5,593,198 issued to F.D. Vogel, II discloses a relatively flat snow scoop which may be either pushed or pulled along the ground to scoop us snow. As shown in FIG. 3, to dump snow out of the scoop it is lifted with the handle so that snow falls over the rearward edge of the scoop.
- U.S. Patent No. 5,791,072 issued to M. Schbot discloses a rather large, angularly adjustable, generally V-shaped snow plow having a handle similar to a regular shovel handle for manually pushing the plow in a forward direction.
- U.S. Patent 5,863,084 issued to R.D. Krug on January 26, 1999, entitled "Lifting Aid Device for a Shovel," discloses a brace member designed to abut against the leg or thigh of the user so that the leg acts as a brace or lever.
- U.S. Patent No. 3,063,174 issued to E. Ludin discloses a scoop/shovel comprised of a scoop and handle combination having a pair of castor-type wheels or rollers connected to the rear side of the scoop. While snow is pushed forwardly in the scoop, there is no means described for dumping or unloading the snow.
- U.S. Patent No. 3,475,838 issued to K.G. Hagen et al. discloses a snow scoop having a frame structure with a ribbed plastic bucket mounted cover thereon into which snow is scooped and loaded and then dumped.
- U.S. Patent No. 4,161,073 issued to W. Oakes discloses a snow scoop which is attachable to a standard hand truck and which pivots upwardly so that it can be more easily stored.
- U.S. Patent No. 4,224,751 issued to G.J. Schoemann on September 30, 1980, entitled "Snow Lifting Device," discloses a wheeled push-type snow scoop having a frame structure and a flexible polypropylene sheet attached thereto which serves as the scoop. A rope connects the top edge of the scoop to a hand lever. Pulling the hand lever causes the scoop to "flex", wherein the snow is forced out of the scoop

- U.S. Patent No. 4,809,219 issued to C. Berg discloses a more or less conventional shovel having rollers connected behind the lower edge of the blade, the position of which rollers is adjustable.
- U.S. Patent No. 5,056,245 issued to S.L. Jenkins et al. disclose a rather large push-type snow removal device having a centrally located wheel to facilitate pushing of the device across a surface and also having in another embodiment a tubular handle for pushing the device.
- U.S. Patent No. 5,581,915 issued to E.J. Lobato discloses a wheeled carriage structure to which a conventional snow shovel may be attached so that such conventional shovel can be used as a plow.
- U.S. Design Patent 206,177 issued to O.K. Unruh discloses an ornamental design for combination snow shovel and wheeled cart. It appears that there may be a lever arrangement for dumping snow out of the cart, although this is not exactly clear.
- U.S. Design Patent 275,928 issued to D.R. LoPresti on October 16, 1984, entitled "Levered Shovel Unit," discloses an ornamental design for a shovel having a lever or fulcrum arrangement similar to those described with reference to several of the above-discussed references.
- U.S. Design Patent 307,378 issued to S.R. D'Alessandro discloses an ornamental design for a snow shovel having wheels on the underside of the shovel blade.
- U.S. Design Patent 314,318 issued to K.A. Uimonen discloses an ornamental design for a plow-type shovel also having wheels mounted thereto.
- U.S. Design Patent 375,235 issued to K.J. Spear discloses an ornamental design for a push-type wheeled snow scoop having a ribbed scoop face
- U.S. Design Patent 378,890 issued to J. Furno discloses an ornamental design for a plow-type snow shovel having a U-shaped handle and a pair of spaced apart wheels.
- U.S. Design Patent 383,582 issued to S. Sinclair, Jr. discloses an ornamental design for a four-wheeled cart-type snow scoop.

- U.S. Design Patent 407,723 issued to D.G. Weisman et al. discloses an ornamental design for a snow plow having a V-shaped shovel or blade and a pair of wheels.
- U.S. Design Patent 459,641 issued H.Z. Guneysu discloses a regular looking snow shovel having small wheels connected along the outer sides of the shovel blade.

In accordance with M.P.E.P. sections 609 and 7.07.05(b), it is requested that each document cited by the Applicant herein (including those cited and discussed in Applicant's specification, if any) be given thorough consideration and that it be cited of record in the prosecution history of the present application by initialing on the attached PTO Form 1449, so that each reference will appear on the face of any patent issuing from the present application, even if the Examiner does not consider such reference sufficiently pertinent to use in a rejection, or otherwise does not consider it to be prior art for any other reason, or even if the Examiner does not believe that the guidelines for citation have been fully complied with.

The present Disclosure Statement is being submitted in compliance with 37 C.F.R. 1.56 under the broad standard that an Examiner might consider any cited document important in deciding whether to allow the application to issue as a patent. It is not believed any reference cited specifically rises to the standard of being a prima facie invalidating reference for any of the Applicant's claims. The citation of any document should not be construed as an admission that such document is necessarily relevant or even prior art. No representation is intended, furthermore, that the cited documents represent the results of a complete search, and it is anticipated that the Examiner, in the normal course of examination, will make an independent search and will determine the best prior art consistent with 37 C.F.R. 1.04(a) and 1.106(b), and in the course of such search, will review for relevance every document cited on the attached form even if not initialed.

This prior art disclosure is being submitted prior to the first official substantive action in the application. Consequently, no fee should be involved in its submission. It is believed, therefore, that no fees are due for this citation of the above prior art. However, if any additional fees are due, please charge such fees against Deposit Account No. 15-0385.

Respectively submitted,

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PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

Substitute for form 1449/PTO

Sheet 1

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

9/PTO	Complete if Known		
3.1.70	Application Number	10/613,466	
TION DISCLOSURE	Filing Date	07/03/2003	
TION DISCLOSURE	First Named Inventor	Anthony Stratz	
NT BY APPLICANT	Art Unit	3671	
nany sheets as necessary)	Examiner Name		
of 3: 4	Attorney Docket Number	319	

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		<sup>US-</sup> 584,827-B1		B.F. McIndoo	FIGS. 1-2, Cols. 1-2
		<sup>US-</sup> 738,057-B1		E.B. O'Connor	FIGS. 2-3, Cols.1-3
		US- 2,239,297-B1		S.E. Allen et al.	FIG. 3
		<sup>US-</sup> 2,734,291-B1		C.C. Lasker	FIG. 1, Col. 2
		<sup>US-</sup> 2,769,612-B1		C. Weisheit	FIGS. 2-4, Col. 2
	-	<sup>US-</sup> 3,035,816-B1		M.A. Conant	FIGS. 1-7
		<sup>US-</sup> 3,043,033-B1		H.O. Ingram et al.	FIGS. 2-3a,
		<sup>US-</sup> 3,121,963-B1		C.W. Nolan	FIGS. 3-4, Col. 2
		<sup>US-</sup> 3,343,807-B1		A.L. Moraski	FIGS. 1-6, Cols. 1-2
		<sup>US-</sup> 3,748,761-B1		C.H Chetwynde	FIG. 1
		<sup>US-</sup> 3,923,331-B1		A.A. Hollnagel	FIG. 4, Cols. 2-3
		<sup>US-</sup> 4,125,951-B1		A.W. Huerth	Col, 2
		<sup>US-</sup> 4,130,953-B1		A.T. Bruno	FIGS. 1-4
		US- 4,198,090-B1		D. Gutman	FIG. 2
		US- 4,531,713-B1		F.H. Balboni	FIGS. 1-4
		<sup>US-</sup> 4,559,726-B1		M. Moisan	FIGS. 1-2
		<sup>US-</sup> 4,881,332-B1		G.L. Evertsen	FIGS. 1, 10-19
		<sup>US-</sup> 5,018,282-B1		K.Y. Hong	FIGS. 1-5
		<sup>US-</sup> 5,074,064-B1		J.G. Nickels	FIG. 1, Cols. 2-3

		FORE	<b>GN PATENT DOCU</b>	MENTS		
Examiner Initials*	Cite No.1	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages	
		Country Code <sup>3</sup> -Number <sup>4</sup> -Kind Code <sup>5</sup> (if known)	MM-DD-YYYY		Or Relevant Figures Appear	T <sup>6</sup>
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Translation is attached.

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Complete if Known

Application Number 10/613,466 Filing Date 07/03/2003 First Named Inventor

STATEMENT BY APPLICANT (Use as many sheets as necessary)

INFORMATION DISCLOSURE

**Anthony Stratz** Art Unit 3671 **Examiner Name** 

Attorney Docket Number 319 Sheet 2

	Lav			Name of Patentee or	Pages, Columns, Lines, Where
Examiner Initials*	Cite No. <sup>1</sup>	Document Number  Number-Kind Code <sup>2 (if known)</sup>	Publication Date MM-DD-YYYY	Applicant of Cited Document	Relevant Passages or Relevant Figures Appear
		<sup>US-</sup> 5,271,169-B1		K.J. Konsztowicz	FIGS. 7-11
		<sup>US-</sup> 5,440,828-B1		R.C. Simpson	FIG. 3, Col. 1
		<sup>US-</sup> 5,511,327-B1		M.G. Jurkowski et al	FIGS. 3, 5, Col. 6
		<sup>US-</sup> 5,669,651-B1		A. Vroegindewey	FIGS. 5-10,
		<sup>US-</sup> 5,732,933-B1		F.K. Champi	FIGS. 1-12, Col. 2
		<sup>US-</sup> 5,918,921-B1		V. Samuelson	FIG. 1
-		<sup>US-</sup> 5,984,393-B1		R.H. Washington	FIG. 1
		<sup>US-</sup> 6,053,548-B1		L.G. Bowles, Jr.	FIGS. 2, 7-9
		<sup>US-</sup> 6,086,049-B1		D.A. Sheils	FIGS. 1-8
		<sup>US-</sup> 6,203,081-B1		E.B. Kegan, Sr.	FIGS. 8-12
*		<sup>US-</sup> 6,485,076-B1		W.N. Chang	FIGS. 13-16
		<sup>US-</sup> 6,457,757-B2		J.D. Hendrick	FIG. 1
-		<sup>US-</sup> 258,260-B1		H.W. Staples	FIGS. 1-3
		<sup>US-</sup> 2,896,993-B1		J.A. Pollock	Cols. 1-2
		<sup>US-</sup> 3,583,746-B1		A. Lissakers	FIGS. 1-2, Cols. 2-3
		<sup>US-</sup> 3,964,182-B1		J. Pomeret et al.	FIG. 1
		<sup>US-</sup> 4,231,604-B1		J.J. Obergfell	Cols. 1-2
		<sup>US-</sup> 4,253,257-B1		D.F. Albert	FIGS. 1, 5-8
		<sup>US-</sup> 4,537,433-B1		S.H. Yang	FIGS. 2-3

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		Cite No.1 Foreign Patent Document	Cite Foreign Patent Document Publication Date MM-DD-YYYY	No. <sup>1</sup> Date Applicant of Cited Document	Cite Foreign Patent Document Publication Name of Patentee or Applicant of Cited Document Where Relevant Passages  MM-DD-YYYY  Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear

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Sheet 3

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Application Number 10/613,466

Filing Date 07/03/2003

First Named Inventor Anthony Stratz

Art Unit 3671

Examiner Name

Attorney Docket Number 319

**U. S. PATENT DOCUMENTS** Examiner Document Number Publication Date Name of Patentee or Pages, Columns, Lines, Where Cite MM-DD-YYYY Applicant of Cited Document Relevant Passages or Relevant Initials\* Figures Appear Number-Kind Code<sup>2</sup> (# known) US- 4.772,057-B1 FIG. 1 H.R. Harvey US- 5,593,198-B1 F.D. Vogel, II FIGS. 1-3 M. Schbot US-5,791,072-B1 FIGS. 1-4 FIGS. 1-3 US- 5,863,084-B1 R.D. Krug FIGS. 1-3 US-3,063,174-B1 E. Ludin K.G. Hagen et al. FIGS. 4-8 US-3,475,838-B1 W. Oakes <sup>US-</sup> 4,161,073-B1 FIG. 3 FIGS. 1-2, Cols. 1-2 US- 4,224,751-B1 G.J. Schoemann et al US- 4.804.219-B1 C. Berg FIGS. 1-5 <sup>US-</sup> 5,056,245-B1 S.L. Jenkins et al. FIGS. 3, 5 FIGS. 1-2 <sup>US-</sup> 5,581,915-B1 E.J. Lobato S.R. D'ALessandro FIG. 3 <sup>US-</sup> 307,378-S FIGS. 3, 5 <sup>US-</sup> 314,318-S K.A. Ulmonen <sup>US-</sup> 375,235-S K.J. Spear et al. FIG. 1 J. Furno US-378-890-S FIGS. 1, 4 US-383,582-S S. Sinclair, Jr. FIGS. 3, 7 D.G. Weisman et al. US- 407,723-S FIG. 1 H.Z. Guneysu FIG. 1 <sup>US-</sup> 459,641-S FIGS. 1-4 <sup>US-</sup> 206-177-S O.K. Unruh

		FORE	<b>IGN PATENT DOCU</b>	MENTS		
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# INFORMATION DISCLOSURE STATEMENT BY APPLICANT

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Application Number	10/613,466			
Filing Date	07/03/2003			
First Named Inventor	Anthony Stratz			
Art Unit	3671			
Examiner Name				
Attornov Docket Number	210			

			U. S. PATENT	DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (# known)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
	1	<sup>US-</sup> 275,928-S		D.R. LoPresti	FIG. 3
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